We claim:

1. A process for preparing polyvinylpyrrolidone-iodine in aqueous solution, where an aqueous polyvinylpyrrolidone solution and at least 4.0% by weight of elemental iodine, based on the polyvinylpyrrolidone calculated as solid, are mixed, wherein at the time of mixing the concentration c of the aqueous polyvinylpyrrolidone, based on the total amount of polyvinylpyrrolidone and water, and the K value of polyvinylpyrrolidone obeys the following relation:

$$c > 100 \times [0.1 + 8 : (K + 5)]$$

- where c is stated in % by weight, and the Fikentscher K value is in the range from 10 to 100.
- A process as claimed in claim 1, wherein the mixture is heated at a temperature in the range from 50 to 110°C for a period of from 30 minutes to 15 hours.
  - 3. A process as claimed in claim 1 or 2, wherein the mixing is carried out in the presence of a reducing agent.
- 25 4. A process as claimed in any of the preceding claims, wherein the reducing agent is selected from formic acid, oxalic acid, the esters and salts of formic and oxalic acids, and the amides of carbonic acid, of formic acid and of oxalic acid.
- 30 5. A process as claimed in any of the preceding claims, wherein the polyvinylpyrrolidone solution and, where appropriate, at least part of the reducing agent are mixed, the mixture is heated where appropriate, and then iodine is added.
- 35 6. A process as claimed in any of the preceding claims, wherein a polyvinylpyrrolidone solution of a polyvinylpyrrolidone with a K value of > 27 and a polyvinylpyrrolidone content of > 35% by weight is employed.
- 40 7. A process as claimed in any of the preceding claims, wherein the polyvinylpyrrolidone-iodine present in the solution has an available iodine content of at least 4% by weight.
- 8. A polyvinylpyrrolidore-iodine solution obtainable by a process as claimed in any of claims 1 to 7.

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9. A solid polyvinylpyrrolidone-iodine obtainable by removing the water and other volatile constituents from an aqueous polyvinylpyrrolidone-iodine solution as defined in claim 8.

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- o. The use of an aqueous polyvinylpyrrolidone-iodine solution as defined in claim 8 or of solid polyvinylpyrrolidone-iodine as defined in claim 9 for producing compositions for disinfection, antisepsis or for wound treatment.
- 10 11. The use as claimed in claim 10 for producing wound coverings.

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12. An antiseptic composition comprising an aqueous polyvinylpyrrolidone-iodine solution as defined in claim 8 or solid polyvinylpyrrolidone-iodine as defined in claim 9.

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